

FIG.1

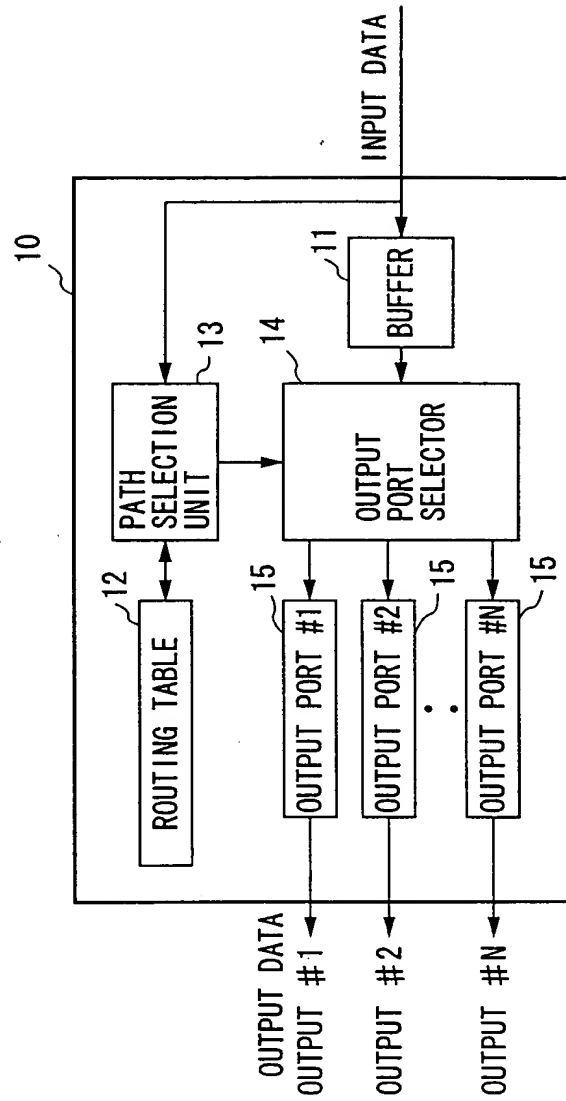
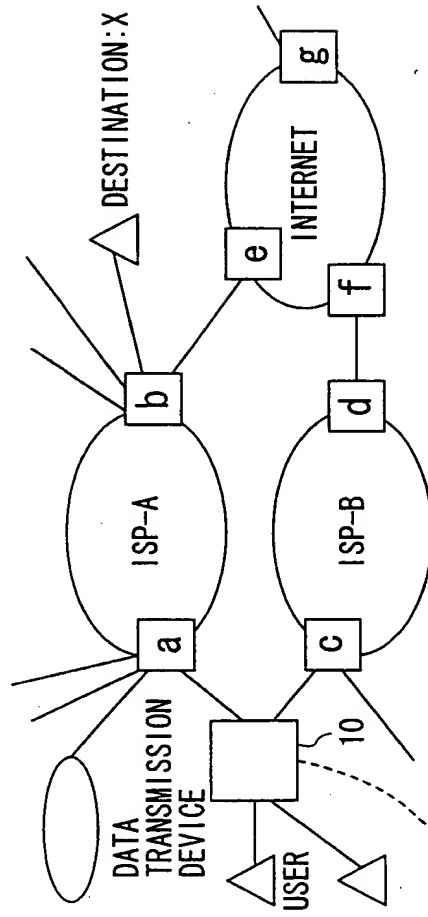


FIG.2



DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	PRIORITY ROUTE
ISP-A	NET	a	1	*
ISP-B	NET	c	2	*
X	HOST	a	1	*
INTERNET	NET	a	1	*
		c	2	*

FIG.3

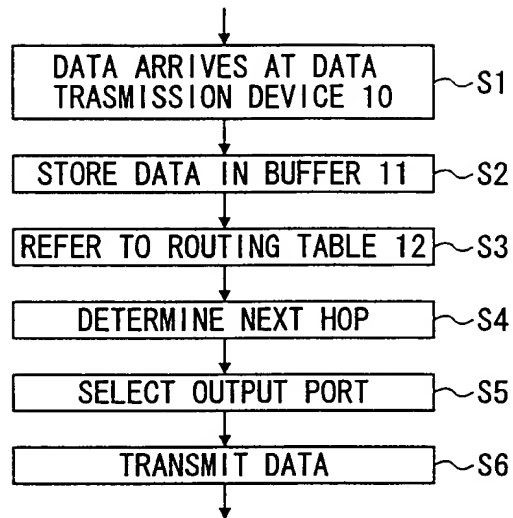


FIG.4

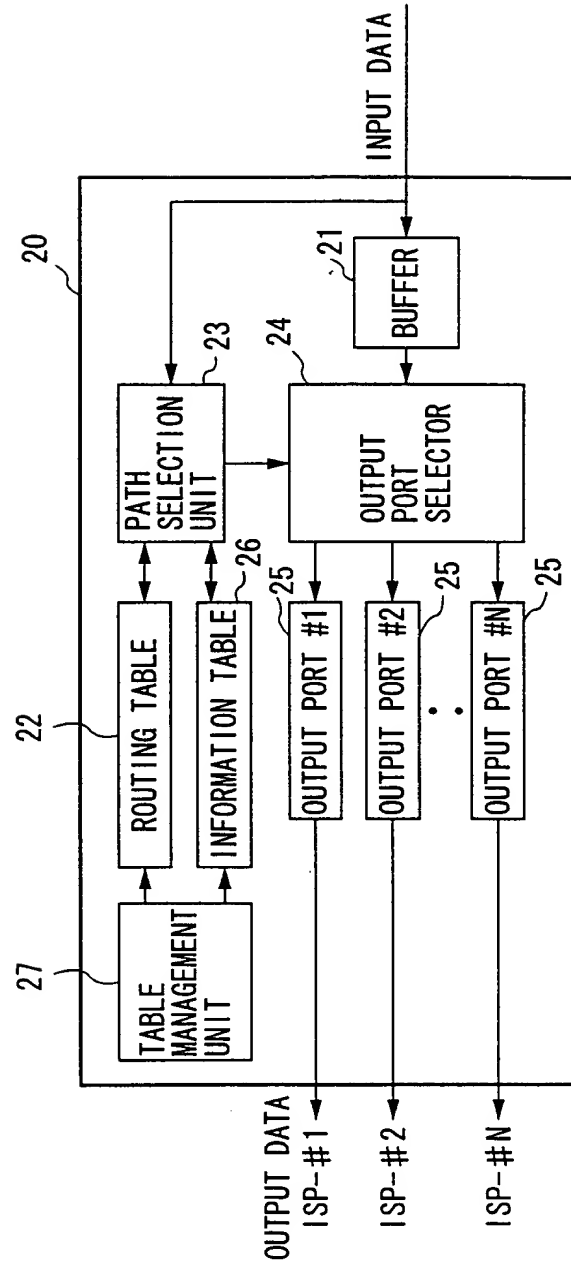


FIG.5A

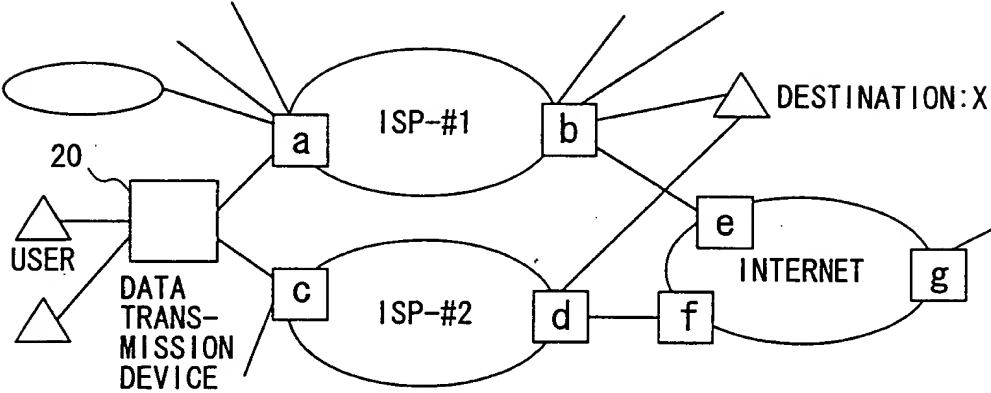


FIG.5B

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	MOST APPROPRIATE ROUTE
ISP-#1	NET	a	1	
ISP-#2	NET	c	2	
X	HOST	a	1	*
		c	2	
INTERNET	NET	a	1	*
		c	2	

FIG.5C

DESTINATION	"VIA" NETWORK	MESSAGE-PACKET RETURN PERIOD	FEE INFORMATION
X	ISP-#1	2	1
	ISP-#2	10	1

FIG.6

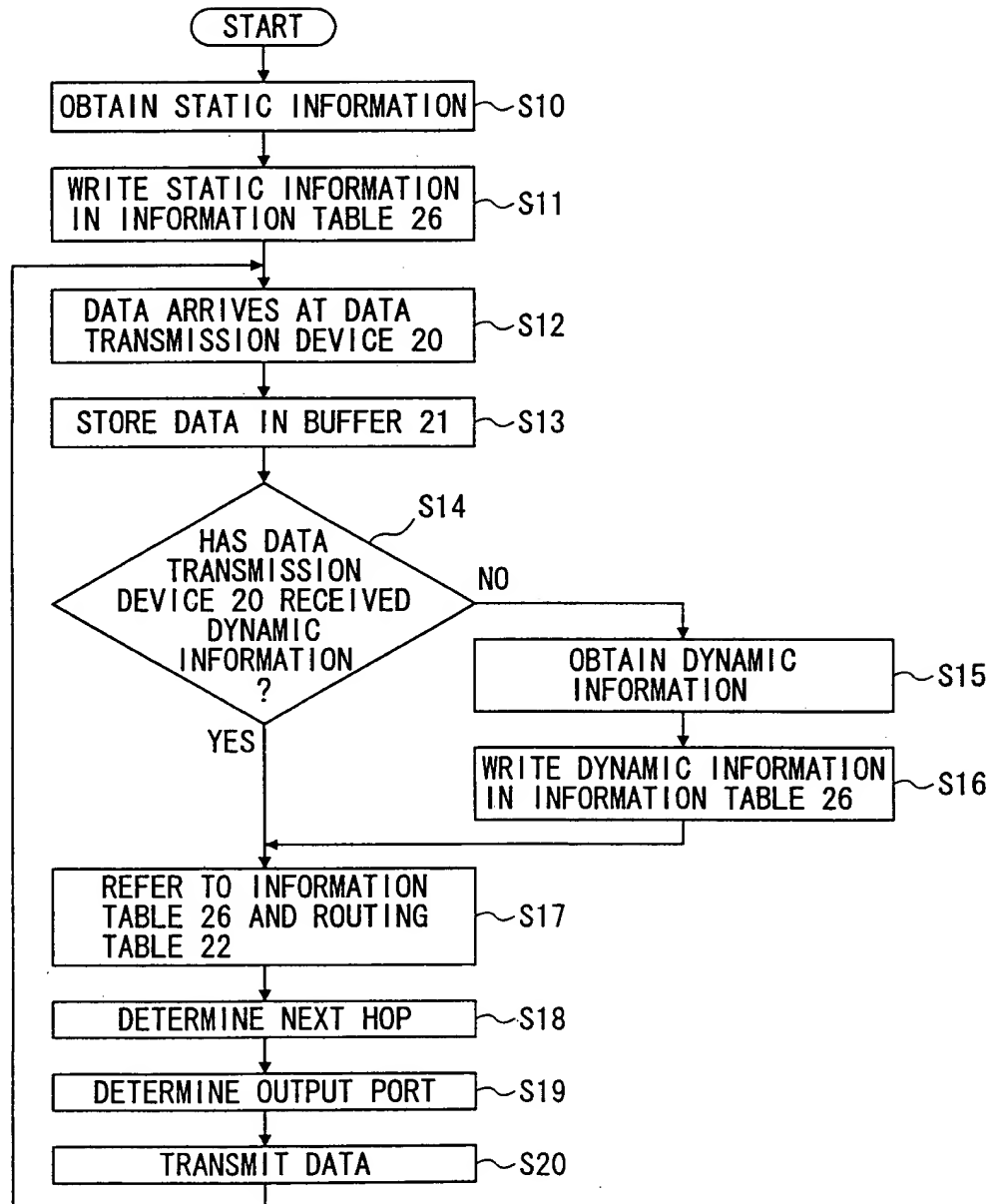


FIG.7

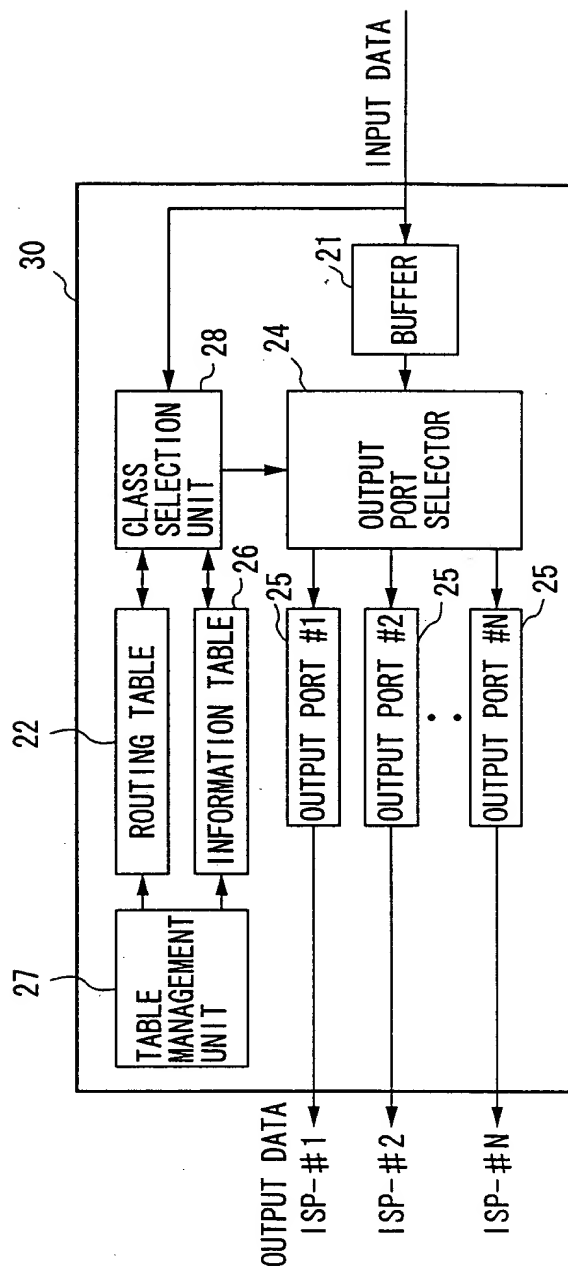


FIG.8A

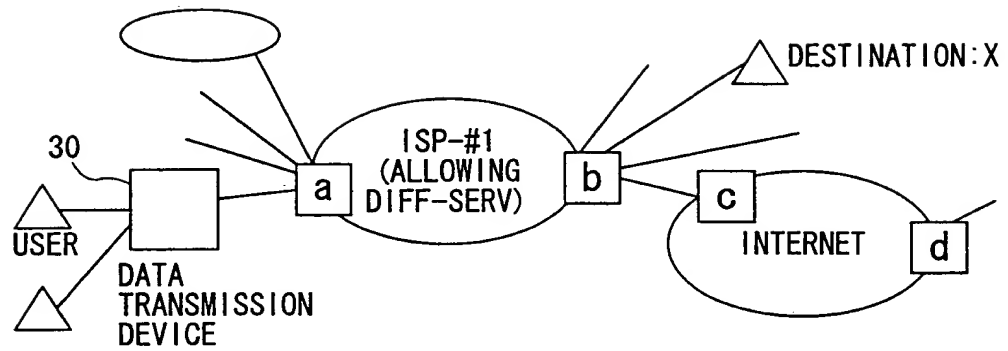


FIG.8B

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	SERVICE CLASS	MOST APPROPRIATE ROUTE	
					SPEED	FEE
ISP-#1	NET	a	1		*	*
X	HOST	a	1	EF-PHB AF-PHB BEST EFFORT	*	*
INTERNET	NET	a	1	EF-PHB AF-PHB BEST EFFORT	*	*

FIG.8C

DESTINATION	SERVICE CLASS	MESSAGE-PACKET RETURN PERIOD	FEE INFORMATION	VALUE FOR SPEED AS FIRST PRIORITY	VALUE FOR FEE AS FIRST PRIORITY
X	EF-PHB	1	20	22.1	46.4
	AF-PHB	4	10	20.9	27.4
	BEST EFFORT	20	1	57.0	26.2

FIG.9

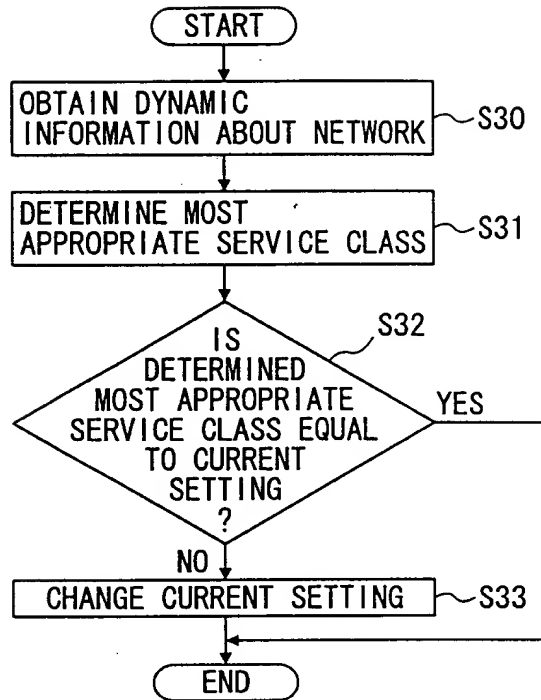


FIG. 11

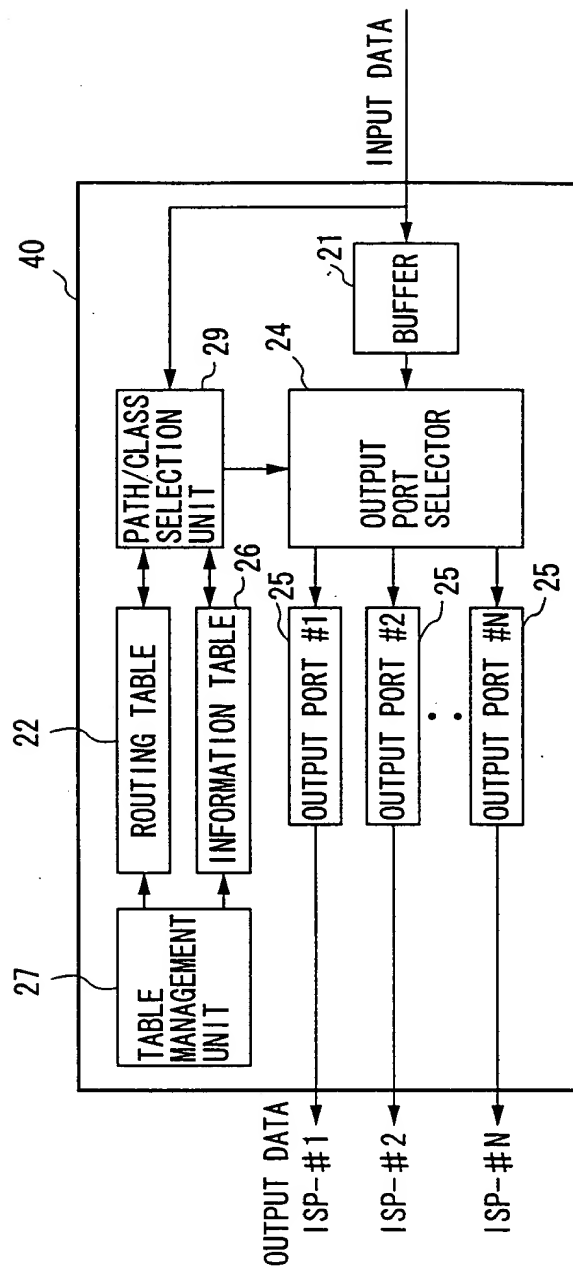


FIG.12A

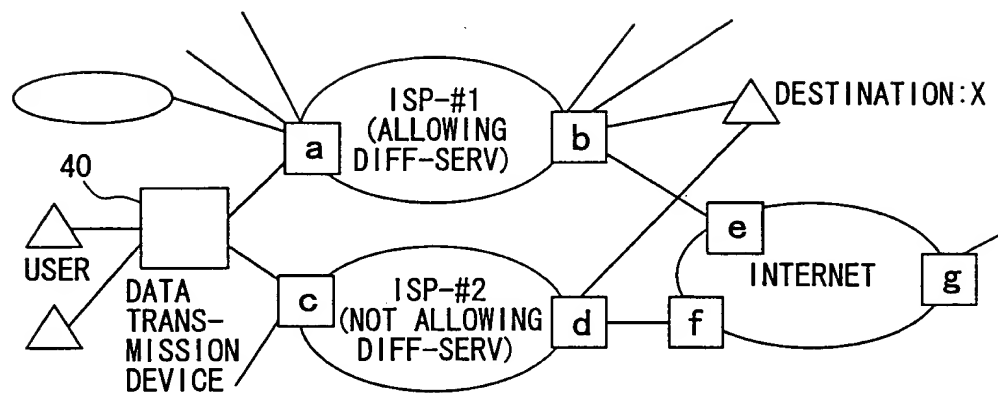


FIG.12B

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	SERVICE CLASS	MOST APPROPRIATE ROUTE	
					SPEED	FEE
ISP-#1	NET	a	1	-	*	*
ISP-#2	NET	c	2	-	*	*
X	HOST	a	1	EF-PHB AF-PHB	*	
				BEST EFFORT BEST EFFORT		
INTERNET	NET	a	1	EF-PHB AF-PHB	*	
				BEST EFFORT BEST EFFORT		

FIG.12C

DESTINATION	"VIA" NETWORK	SERVICE CLASS	MESSAGE-PACKET RETURN PERIOD	FEE INFORMATION	VALUE FOR SPEED AS FIRST PRIORITY	VALUE FOR FEE AS FIRST PRIORITY
X	ISP-#1	EF-PHB	1	20	20.2	43.3
		AF-PHB	4	10	17.1	24.6
		BEST EFFORT	20	1	40.9	19.3
	ISP-#2	(BEST EFFORT)	10	2	21.8	12.8

FIG.13A

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	SERVICE CLASS	MOST APPROPRIATE ROUTE	
					SPEED	FEE
ISP-#1	NET	a	1	-	*	*
ISP-#2	NET	c	2	-	*	*
X	HOST	a	1	EF-PHB		
				AF-PHB		
				BEST EFFORT		
				BEST EFFORT	*	*
INTERNET	NET	a	1	EF-PHB		
				AF-PHB		
				BEST EFFORT		
				BEST EFFORT	*	*

FIG.13B

DESTINATION	"VIA" NETWORK	SERVICE CLASS	MESSAGE-PACKET RETURN PERIOD	FEE INFORMATION	VALUE FOR SPEED AS FIRST PRIORITY	VALUE FOR FEE AS FIRST PRIORITY
X	ISP-#1	EF-PHB	2	20	20.3	43.3
		AF-PHB	10	10	19.5	25.7
		BEST EFFORT	40	1	42.7	20.0
	ISP-#2	(BEST EFFORT)	15	2	17.5	11.0

FIG.14

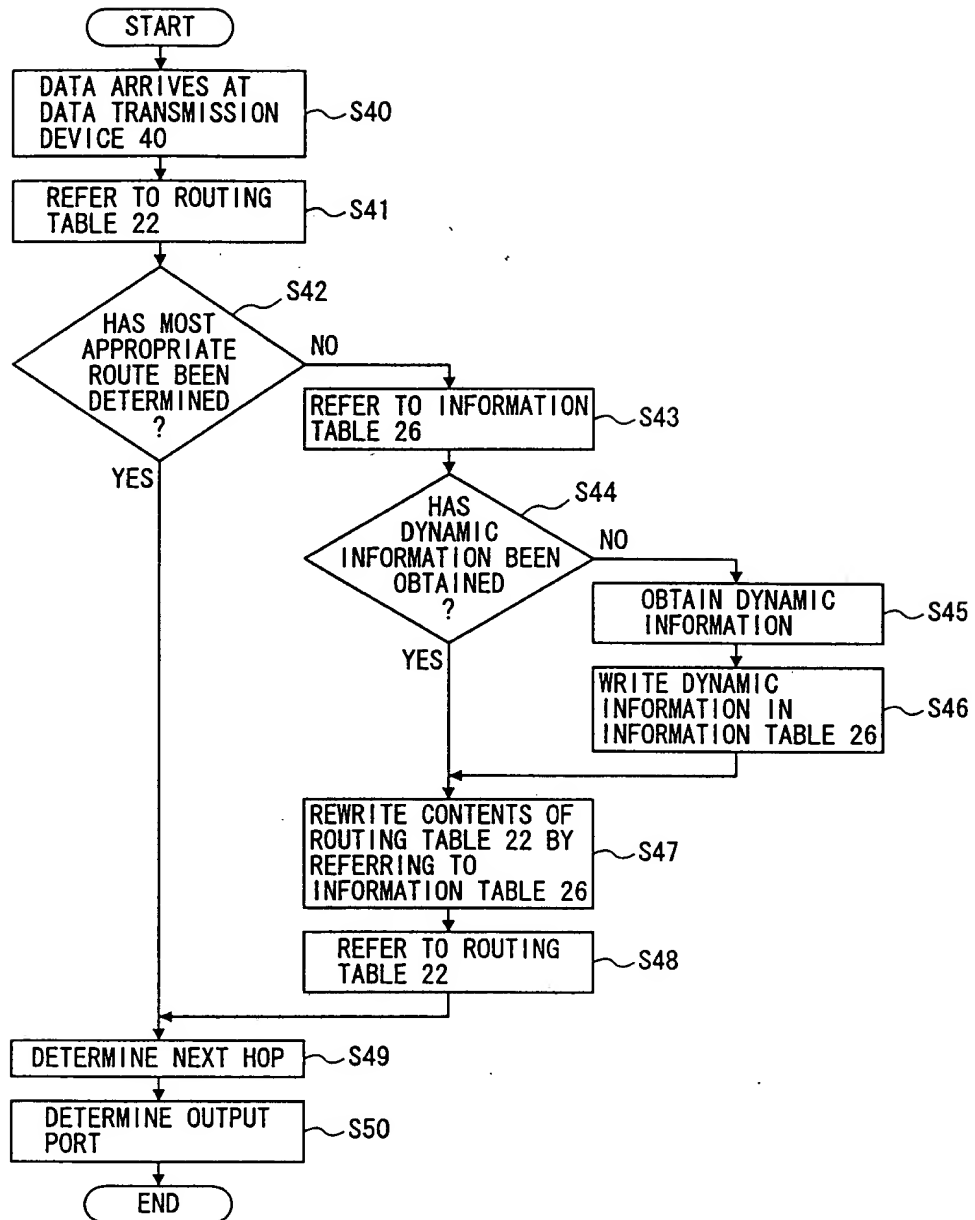


FIG.15

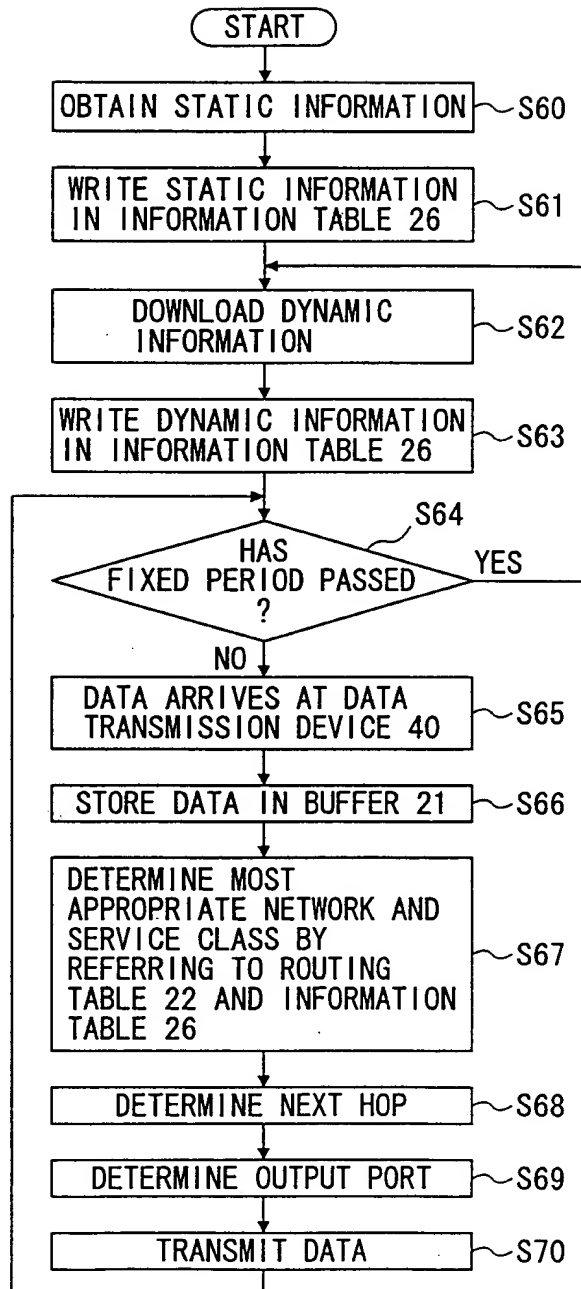
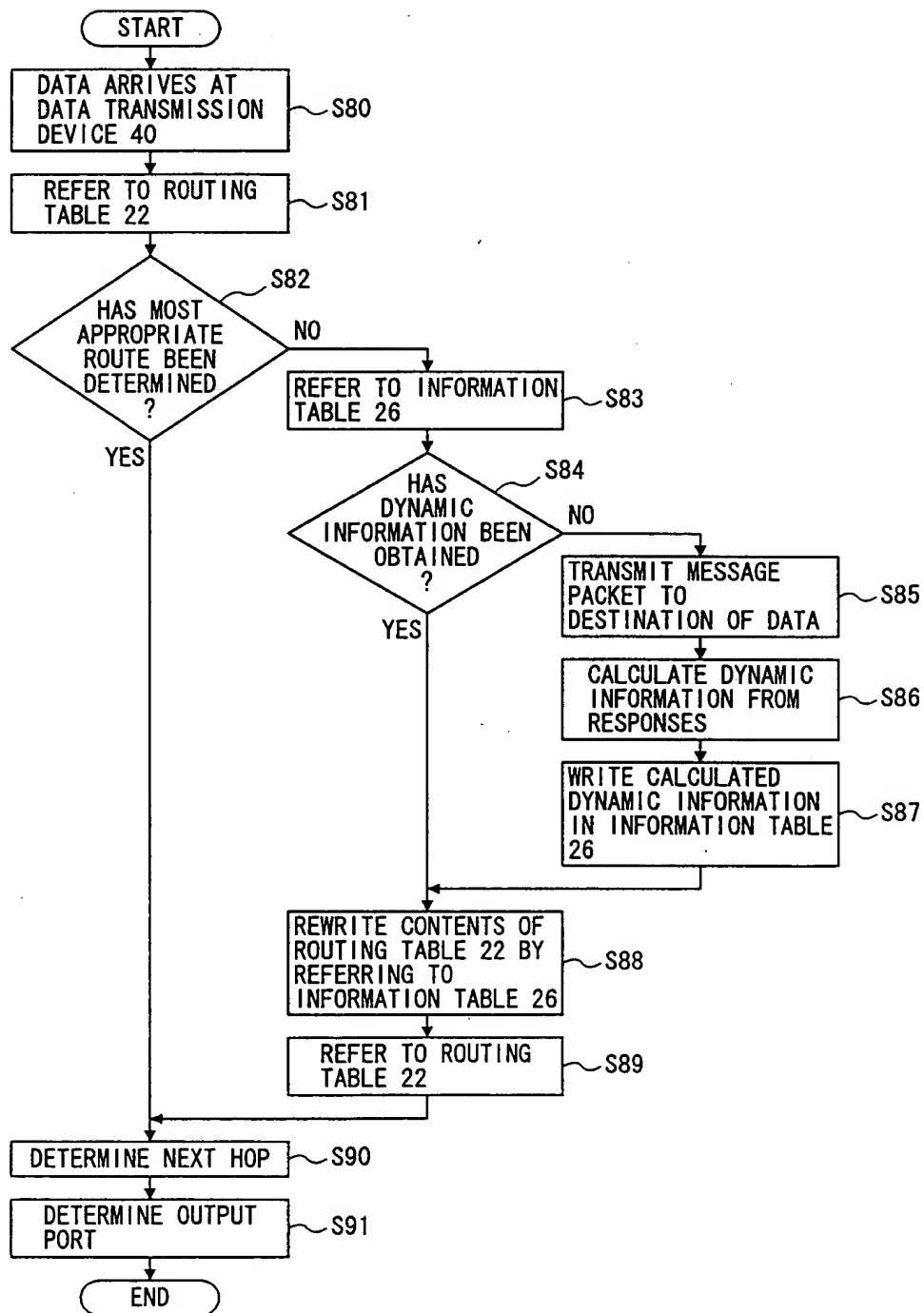


FIG.16



2025032200

FIG.17A

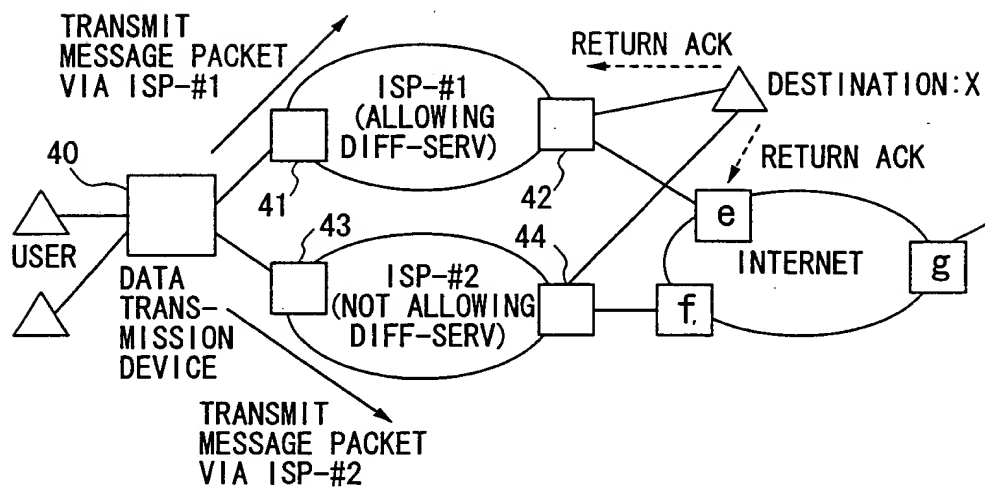


FIG. 17B

FIG.17B

DESTINATION	"VIA" NETWORK	SERVICE CLASS	MESSAGE-PACKET TRANSMISSION TIME	ACK-MESSAGE RECEPTION TIME	DATA TRANSMISSION TIME	FEE INFORMATION
X	ISP-#1	EF-PHB	19:03:41:347	19:04:01:241	00:00:19:894	20
		AF-PHB	19:03:41:347	19:04:09:530	00:00:28:183	10
		BEST EFFORT	19:03:41:347	19:04:39:911	00:00:58:564	1
	ISP-#2	BEST EFFORT	19:03:41:347	19:04:24:520	00:00:43:173	2

FIG.18

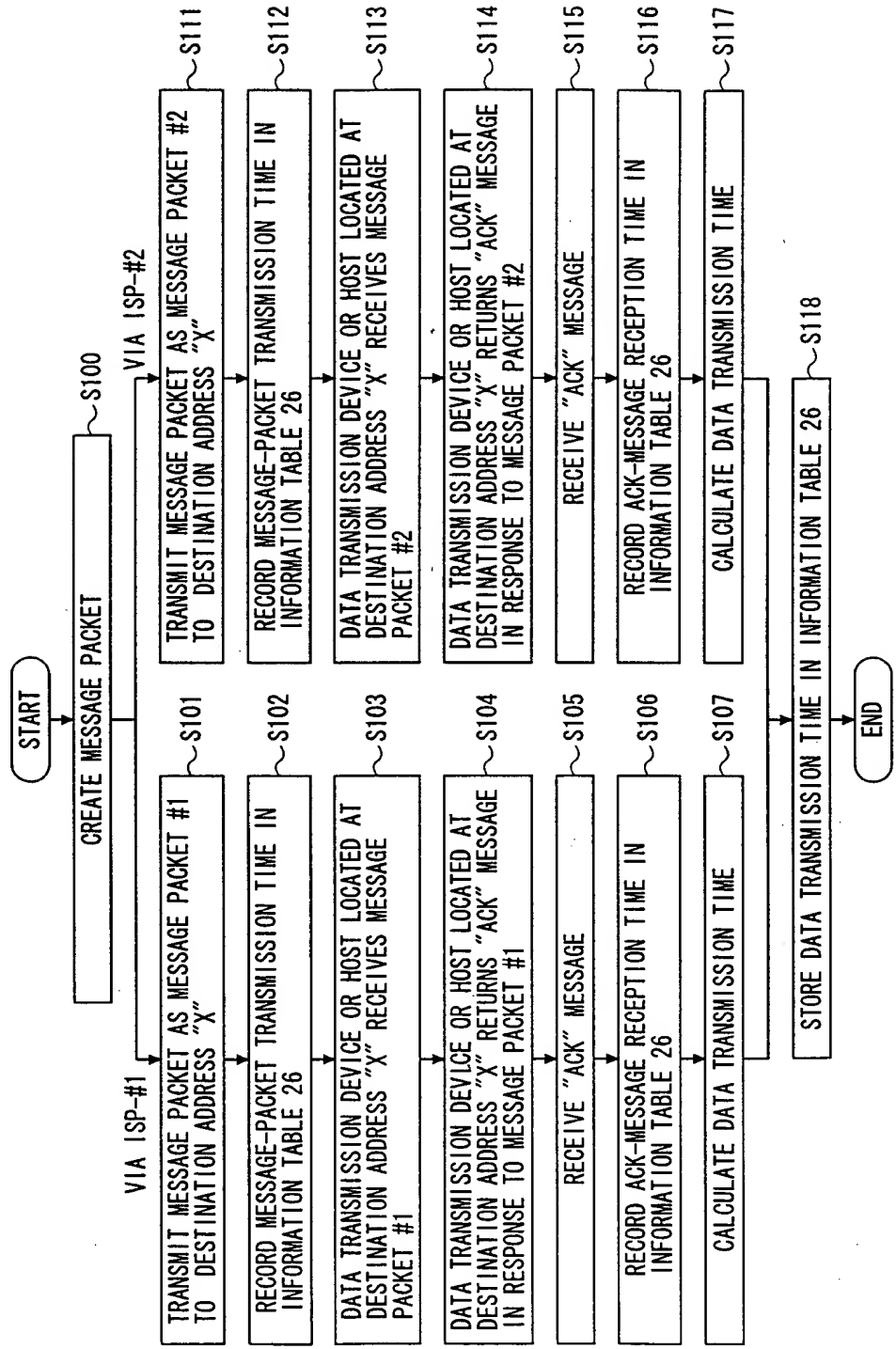


FIG.19A

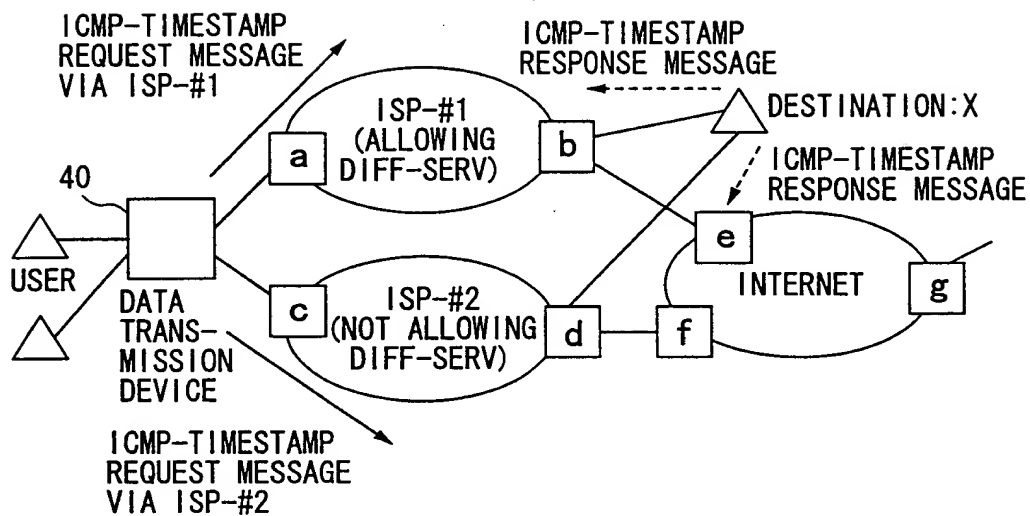


FIG.19B

VERSION	HEADER LENGTH	TOS	PACKET LENGTH	
IDENTIFICATION		FLAG	FRAGMENT OFFSET	
TTL	PROTOCOL TYPE = 01		HEADER CHECKSUM	
SOURCE IP ADDRESS				
DESTINATION IP ADDRESS				
OPTION		PADDING		
ICMP TYPE = 0D/0E		CODE (ALWAYS 0)	CHECKSUM	
IDENTIFIER		SEQUENCE NUMBER		
(ORIGINATE TIMESTAMP)				
(RECEIVE TIMESTAMP)				
(TRANSMIT TIMESTAMP)				

FIG.20

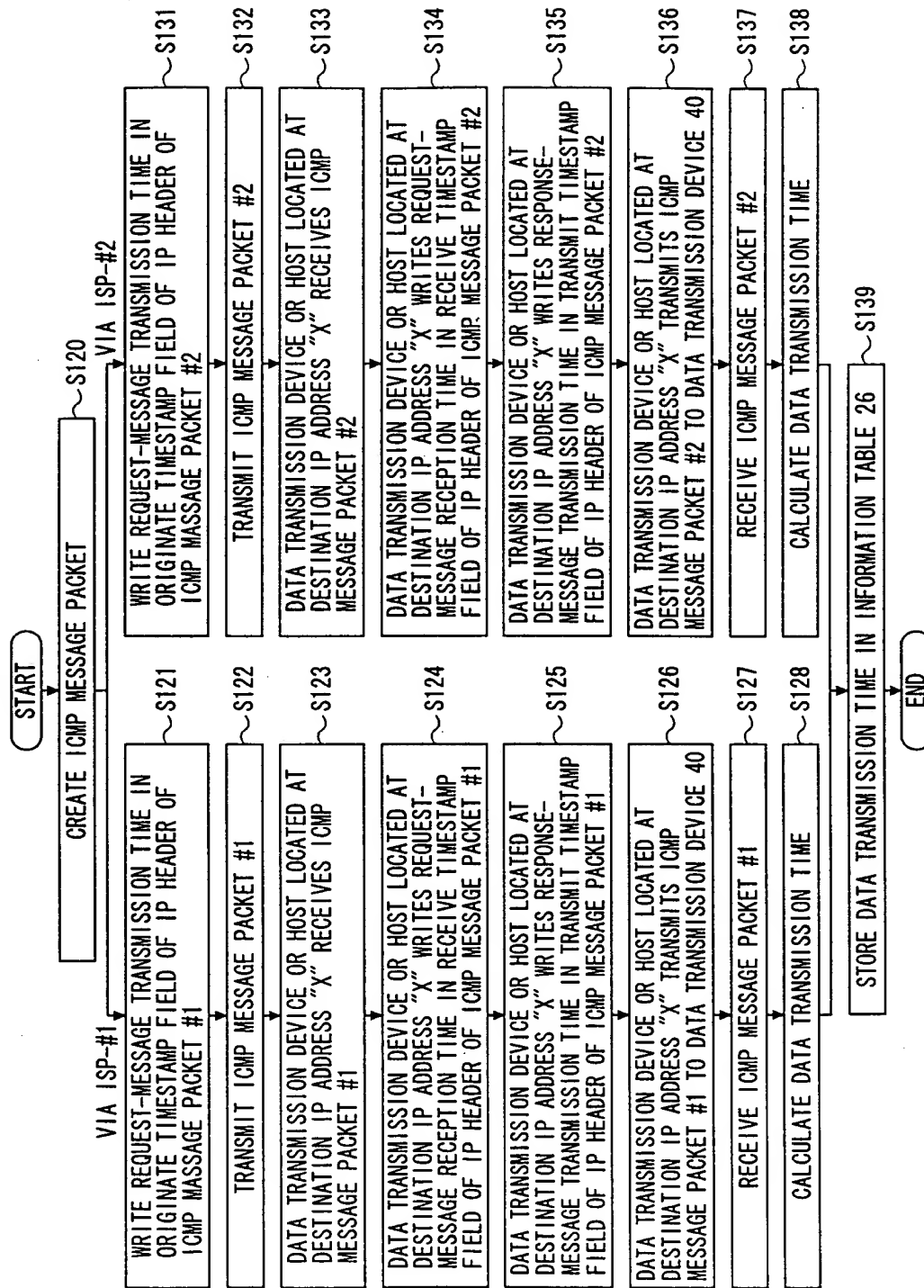


FIG. 21

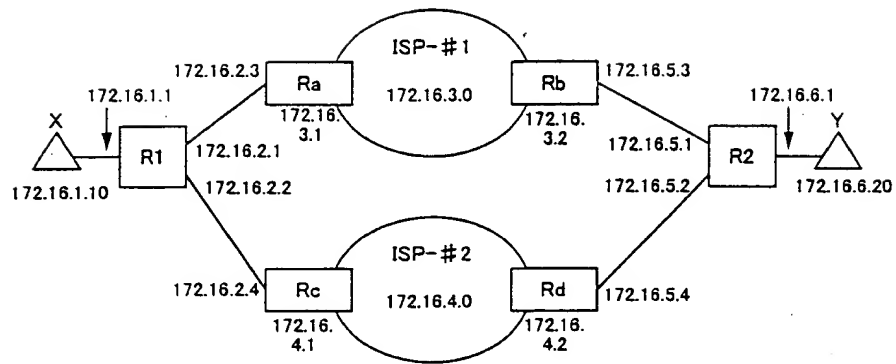


FIG.22A

DESTINATION	"VIA" NETWORK	MESSAGE-PACKET RETURN PERIOD	FEE INFORMATION
172. 16. 2. 20	ISP-#1	-	1
	ISP-#2	-	1

FIG.22B

DESTINATION IP ADDRESS	HOST/NET	NEXT HOP	OUTPUT PORT	MOST APPROPRIATE ROUTE
172. 16. 1. 10	HOST	-	1	*
172. 16. 2. 3		-	2	*
172. 16. 2. 4		-	3	*
172. 16. 3. 0/24	NET	172. 16. 2. 3	2	*
172. 16. 4. 0/24	NET	172. 16. 2. 4	3	*
172. 16. 5. 0/24	NET	172. 16. 2. 3	2	
		172. 16. 2. 4	3	
172. 16. 6. 0/24	NET	172. 16. 2. 3	2	
		172. 16. 2. 4	3	

FIG.23A

VERSION	HEADER LENGTH	TOS		PACKET LENGTH	
IDENTIFICATION		FLAG	FRAGMENT OFFSET		
TTL	PROTOCOL TYPE = 01		HEADER CHECKSUM		
SOURCE IP ADDRESS = 172.16.2.1					
DESTINATION IP ADDRESS = 172.16.6.20					
OPTION TYPE = 10000011	OPTION LENGTH	POINTER		ADDRESS 1 =	
	172.16.2.1 (R1)			ADDRESS 2 =	
	172.16.3.1 (Ra)			ADDRESS 3 =	
	172.16.6.20 (HOST Y)			PADDING	
ICMP TYPE = 0D	CODE (ALWAYS 0)			CHECKSUM	
IDENTIFIER = DEAD				SEQUENCE NUMBER = 0000	
ORIGINATE TIMESTAMP = 19:03:41:347					
(RECEIVE TIMESTAMP)					
(TRANSMIT TIMESTAMP)					

FIG.23B

VERSION	HEADER LENGTH	TOS	PACKET LENGTH	
IDENTIFICATION		FLAG	FRAGMENT OFFSET	
TTL	PROTOCOL TYPE = 01		HEADER CHECKSUM	
SOURCE IP ADDRESS = 172.16.2.1				
DESTINATION IP ADDRESS = 172.16.6.20				
OPTION TYPE = 10000011	OPTION LENGTH	POINTER	ADDRESS 1 =	
	172.16.2.1 (R1)		ADDRESS 2 =	
	172.16.4.1 (Rc)		ADDRESS 3 =	
	172.16.6.20 (HOST Y)		PADDING	
ICMP TYPE = 00	CODE (ALWAYS 0)	CHECKSUM		
IDENTIFIER = DEAE		SEQUENCE NUMBER = 0000		
ORIGINATE TIMESTAMP = 19:03:41:347				
(RECEIVE TIMESTAMP)				
(TRANSMIT TIMESTAMP)				

FIG.24A

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	MOST APPROPRIATE ROUTE
172.16.1.0/24	NET	172.16.2.1	1	*
172.16.2.0/24	NET	-	1	*
172.16.3.0/24	NET	-	2	*
172.16.4.0/24	NET	172.16.2.1	2	*
172.16.5.0/24	NET	172.16.3.2	2	*
172.16.6.0/24	NET	172.16.3.2	2	*

FIG.24B

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	MOST APPROPRIATE ROUTE
172.16.1.0/24	NET	172.16.3.1	1	*
172.16.2.0/24	NET	172.16.3.1	1	*
172.16.3.0/24	NET	-	1	*
172.16.4.0/24	NET	172.16.5.1	2	*
172.16.5.0/24	NET	-	2	*
172.16.6.0/24	NET	172.16.5.1	2	*

FIG.24C

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	MOST APPROPRIATE ROUTE
172.16.1.0/24	NET	172.16.5.3	1	*
		172.16.5.4	2	
172.16.2.0/24	NET	172.16.5.3	1	*
		172.16.5.4	2	
172.16.3.0/24	NET	172.16.5.3	1	*
172.16.4.0/24	NET	172.16.5.4	2	*
172.16.5.0/24	NET	-	1	*
172.16.6.0/24	HOST	-	3	*

4.0.0.0 0.0.0.0 0.0.0.0

FIG.25A

VERSION	HEADER LENGTH	TOS	PACKET LENGTH	
IDENTIFICATION		FLAG	FRAGMENT OFFSET	
TTL	PROTOCOL TYPE = 01		HEADER CHECKSUM	
SOURCE IP ADDRESS = 172. 16. 6. 20				
DESTINATION IP ADDRESS = 172. 16. 2. 1				
ICMP TYPE = 0E	CODE (ALWAYS 0)		CHECKSUM	
IDENTIFIER = DEAD		SEQUENCE NUMBER = 0000		
ORIGINATE TIMESTAMP = 19:03:41:347				
RECEIVE TIMESTAMP = 19:04:01:241				
TRANSMIT TIMESTAMP = 19:04:01:583				

FIG.25B

DESTINATION	"VIA" NETWORK	MESSAGE-PACKET RETURN PERIOD	FEE INFORMATION
Y	ISP-#1	00:00:19:894	1
	ISP-#2	00:00:28:183	1

FIG.25C

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	MOST APPROPRIATE ROUTE
172.16.1.10	HOST	-	1	*
172.16.2.3		-	2	*
172.16.2.4		-	3	*
172.16.3.0/24	NET	172.16.2.3	2	*
172.16.4.0/24	NET	172.16.2.4	3	*
172.16.5.0/24	NET	172.16.2.3	2	*
		172.16.2.4	3	
172.16.6.0/24	NET	172.16.2.3	2	*
		172.16.2.4	3	

FIG.26

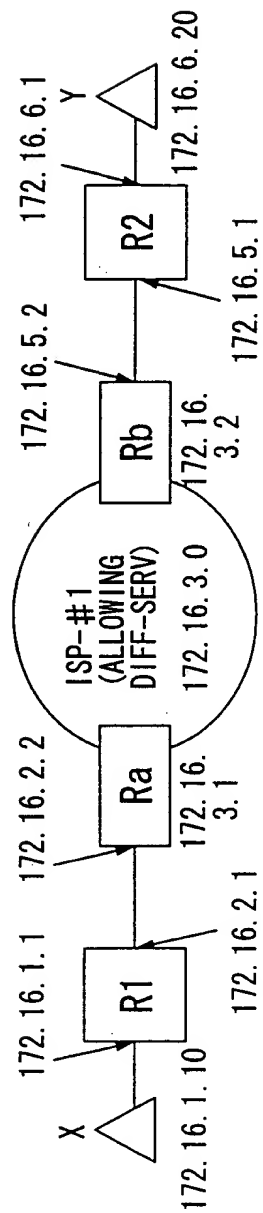


FIG.27A

DESTINATION	SERVICE CLASS	MESSAGE-PACKET RETURN PERIOD	FEE INFORMATION	VALUE FOR SPEED AS FIRST PRIORITY	VALUE FOR FEE AS FIRST PRIORITY
172.16.6.20	EF-PHB	-	10		
	AF-PHB	-	5		
	BEST EFFORT	-	1		

FIG.27B

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	SERVICE CLASS	MOST APPROPRIATE ROUTE
172.16.1.10	HOST	-	1	-	*
172.16.2.0/24	NET	-	2	-	*
172.16.3.0/24	NET	172.16.2.2	2	EF-PHB AF-PHB BEST EFFORT	
172.16.5.0/24	NET	172.16.2.2	2	EF-PHB AF-PHB BEST EFFORT	
172.16.6.0/24	NET	172.16.2.2	2	EF-PHB AF-PHB BEST EFFORT	

FIG.28B

VERSION	HEADER LENGTH	AF-PHB	PACKET LENGTH	
IDENTIFICATION		FLAG	FRAGMENT OFFSET	
TTL	PROTOCOL TYPE = 01		HEADER CHECKSUM	
SOURCE IP ADDRESS = 172.16.2.1				
DESTINATION IP ADDRESS = 172.16.6.20				
ICMP TYPE = 00	CODE (ALWAYS 0)		CHECKSUM	
IDENTIFIER = DEAE		SEQUENCE NUMBER = 0000		
ORIGINATE TIMESTAMP = 19:03:41:347				
(RECEIVE TIMESTAMP)				
(TRANSMIT TIMESTAMP)				

FIG.28C

VERSION	HEADER LENGTH	BEST EFFORT	PACKET LENGTH	
IDENTIFICATION		FLAG	FRAGMENT OFFSET	
TTL	PROTOCOL TYPE = 01		HEADER CHECKSUM	
SOURCE IP ADDRESS = 172.16.2.1				
DESTINATION IP ADDRESS = 172.16.6.20				
ICMP TYPE = 0D	CODE (ALWAYS 0)		CHECKSUM	
IDENTIFIER = DEAF			SEQUENCE NUMBER = 0000	
ORIGINATE TIMESTAMP = 19:03:41:347				
(RECEIVE TIMESTAMP)				
(TRANSMIT TIMESTAMP)				

FIG. 29A

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	SERVICE CLASS	MOST APPROPRIATE ROUTE
172.16.1.0/24	NET	172.16.2.1	1	-	*
172.16.2.0/24	NET	-	1	-	*
172.16.3.0/24	NET	-	2	EF-PHB AF-PHB BEST EFFORT	
172.16.5.0/24	NET	172.16.3.2	2	EF-PHB AF-PHB BEST EFFORT	
172.16.6.0/24	NET	172.16.3.2	2	EF-PHB AF-PHB BEST EFFORT	

FIG. 29B

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	SERVICE CLASS	MOST APPROPRIATE ROUTE
172.16.1.0/24	NET	172.16.3.1	1	EF-PHB AF-PHB BEST EFFORT	
172.16.2.0/24	NET	172.16.3.1	1	EF-PHB AF-PHB BEST EFFORT	
172.16.3.0/24	NET		1	EF-PHB AF-PHB BEST EFFORT	
172.16.5.0/24	NET		2	-	*
172.16.6.0/24	NET	172.16.5.1	2	-	*

1

FIG.30B

DESTINATION	SERVICE CLASS	MESSAGE-PACKET RETURN PERIOD	FEE INFORMATION	VALUE FOR SPEED AS FIRST PRIORITY	VALUE FOR FEE AS FIRST PRIORITY
172.16.6.20	EF-PHB	00:00:19:894	20	32.4	50.8
	AF-PHB	00:00:28:183	10	28.2	30.5
	BEST EFFORT	00:00:58:564	1	39.4	18.7

FIG.30C

DESTINATION	HOST/NET	NEXT HOP	OUTPUT PORT	SERVICE CLASS	MOST APPROPRIATE ROUTE	
					SPEED	FEE
172.16.1.10	HOST	-	1	-	*	*
172.16.2.0/24	NET	-	2	-	*	*
172.16.3.0/24	NET	172.16.2.2	2	EF-PHB AF-PHB BEST EFFORT		
172.16.5.0/24	NET	172.16.2.2	2	EF-PHB AF-PHB BEST EFFORT1	*	
172.16.6.0/24	NET	172.16.2.2	2	EF-PHB AF-PHB BEST EFFORT1		*